

REMARKS

The Office Action mailed June 1, 2009, considered and rejected claims 1-5, 24-36 and 38-42. Claims 1-5, 24-36 and 38-42 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Faiman* (A Survey of the Java Media Framework 2.0).¹

By this response, claims 1, 3-5, 24, 38, and 40-42 are amended, while claims 2 and 39 are canceled. Claims 1, 3-5, 24-36, 38, and 40-42 remain pending of which claims 1, 24, and 38 are independent.

The present invention is directed to embodiments for determining the maximum playback rate that can be performed by a multimedia system. The present invention queries the various components that process a media stream to determine which component is the limiting factor. A determination is then made as to what the maximum playback rate should be. Each of the independent claims has been amended to clarify what components are queried to determine the maximum playback rate. Specifically, it is recited that at least a decoder is queried.

In the office action, the examiner emphasizes that the functional objects were not defined and therefore could not be limited to the intended meaning. The amendments clarify that the functional objects include at least a decoder to address this issue. This distinguishes from the examiner's argument that the objects could be such things as an encoding format such as MP3, WAV, AV1, etc. As was addressed in the previous response, the *Faiman* reference does not disclose each limitation of the independent claims.

Independent Claims 1 and 38

With respect to Claims 1 and 38, in the Office Action the Examiner asserts that *Faiman*'s numbered paragraphs 2.1.2, 2.3.2, 3.3 and 3.5.2 disclose the feature of "*querying each of one or more functional objects in the media system to determine a functional limit of each of the one or more objects for a predetermined function*" recited in Claims 1 and 38.

Paragraph 2.1.2 discloses that Java Media Framework (JMF) players use classes to manage transfer of media streams, and keep track of location, protocol, and software used to transfer specific data streams.

¹ Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

Paragraph 2.3.2 discloses that a JMF processor receives an input, performs type processing on the input and outputs a resulting media stream that can, for example, be provided to another device or object. A user can define the processing operations that the processor performs, which can include converting a data stream from one format to another.

Paragraph 3.3 discloses that a playback rate indicates how many units a JMF Player object's media time advances for every unit of "time-base time", and also indicates that a positive rate indicates play in a forward direction while a negative rate indicates play in a reverse direction. Paragraph 3.3 also discloses that a particular "media time" can specify a location or read position within a media stream, and that a maximum media time defines an end of the data stream. Paragraph 3.3 also discloses that a location in a stream can alternatively be identified by specifying a particular frame in a video stream, instead of a "media time".

Each of these paragraphs fails to teach or suggest: "querying each of one or more functional objects in the media system *to determine a functional limit of each of the one or more objects for a maximum playback rate of a multimedia stream, wherein the one or more functional objects includes at least a decoder that decodes at least a portion of the multimedia stream*; and determining which of the functional limits of the one or more objects maximally limits a capability of the media system for the predetermined function."

The Examiner also asserts that Faïman's numbered paragraph 3.6 discloses a feature of "*determining which of the functional limits of the one or more objects maximally limits a capability of the media system for the predetermined function*", as recited in Claim 1. This assertion is respectfully traversed.

Paragraph 3.6 of Faïman discloses synchronizing playback of multiple media streams by associating multiple players with a same "TimeBase", and by allowing a JMF Player object to assume control over other JMF Controller objects (including Players). When a Player assumes control over a Controller (e.g. another Player), the Controller assumes the Player's time base, and the Player extends its own duration to be the longest of any objects under the Player's control.

However, a time duration of Faïman's player is not a functional limit of the player object, and a longest duration of objects under a JMF Player's command does not maximally limit a capability of a media system using Faïman's Java Media Framework. Accordingly, Faïman's paragraph 3.6 does not disclose or suggest "*determining which of the functional limits of the one*

or more objects maximally limits a capability of the media system for the predetermined function", as recited in Claims 1 and 38.

Accordingly, Faïman as applied by the Examiner fails to disclose or suggest each limitation of claims 1 and 38.

Independent Claim 24

With respect to Claim 24, the Examiner asserts that numbered paragraphs 2.1.2, 2.3.2, 3.3, 3.5.2, 3.6, 4.1 and 4.2 of Faïman discloses a feature of *"a media engine component configured to query each of one or more core layer components in the multimedia system to determine a functional rate limit of each core layer component for a predetermined function, the media engine configured to determine which of the functional limits of the core layer components maximally limits the multimedia system"*, as recited in Claim 24.

As noted further above with respect to Claim 1 which recites similar features, paragraphs 2.1.2, 2.3.2, 3.3, 3.5.2, 3.6 of Faïman are lacking.

Paragraph 4.1 of Faïman discloses creating a Java Media Framework "Processor" object, including a user identifying a data source, a Uniform Resource Locator (URL), or a "MediaLocator" as the Processor's media location. Paragraph 4.1 also discloses that a JMF "Manager" can implicitly find a capture device for capturing audio, and create a Processor for encoding into audio features.

Paragraph 4.2 of Faïman discloses configuring a JMF "Processor". The configuring can be done in several steps, and can include selecting plug-ins to process tracks of a media stream. Paragraph 4.2 also discloses that a user can specify a format of data output by the Processor.

None of these portions of Faïman teach or suggest each limitation of claim 24 including: *"a control layer configured to receive one or more media data streams from an application; and a core layer coupled to the control layer, the control layer including a media engine component configured to query each of one or more core layer components in the multimedia system to determine a functional rate limit of each core layer component for a maximum playback rate of a multimedia stream, wherein the one or more functional objects includes at least a decoder that decodes at least a portion of the multimedia stream, the media engine configured to determine which of the functional limits of the core layer components maximally limits the playback rate of the multimedia system."*

In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at (801) 533-9800.

Dated this 1st day of December, 2009.

Respectfully submitted,

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